Clean water begins with you. Let's Think Blue.

THINK BLUE MASSACHUSETTS

Polluted runoff threatens the health of Massachusetts water. You can do your part at home, at work and at play to help keep our streams clear of pollution after rain and snow melt.

For more tips and information visit www.thinkbluemassachusetts.org.

Scoop it! Pet waste is gross and can make you sick. Bag and dispose of solid pet waste in trash cans.

Close it! Rain water running off of trash cans sends waste into nearby streams. Close your trash can lids, cover dumpsters, and properly dispose of trash to keep pollution locked away.

Stop it! Stormwater pollution often begins at construction sites, but it doesn't have to. Take steps on your job site to prevent dirt from washing into nearby streams, roads and storm drains.

Catch it! Industries and businesses can keep oil, gas, and grease from washing into streams. Use drip pans to catch fluids. Keep absorbent materials close by to clean up small spills. Fix leaks and clean up spills quickly.

Learn more at www.ThinkBlueMassachusetts.org

Stormwater 101

Stormwater is a pollution problem that affects everyone in Massachusetts, but if we all do our part to help, we can reach our goal of clean and healthy waterways.

Where Does Stormwater Come From?
Stormwater starts as rain or melting snow.

Where Does Stormwater Go?
If it doesn't soak into the ground, stormwater heads for the nearest storm drain.

Where Does Stormwater End Up?
Storm drains feed to outfalls that dump stormwater into waterways.
https://www.townofchelmsford.us/513/What-is-a-Storm-Drain

Stormwater and Trash
If you see trash in the water or on the shore, stormwater probably carried it there from a street, sidewalk, or parking lot.

Stormwater and Chemicals
If somebody dumps auto chemicals down a storm drain, or if they leak onto a parking lot, stormwater will carry it into a local waterway.
http://www.uxbridge-ma.gov/Pages/UxbridgeMA_DPW/Stormwater

Stormwater and Landscaping
If somebody applies more fertilizer or pesticide than the landscape can absorb, stormwater will carry the excess into a local waterway.

Stormwater and Erosion
When you see a muddy brook during a rainstorm, that's somebody's property washing away. The mud will eventually smother wildlife habitat downstream.

What Residents Can Do
Every resident can do their part to keep our lakes, rivers, and brooks clean and healthy. Click below for tips to prevent stormwater pollution from your home.
Go to Page Residents

What Businesses Can Do
Businesses, institutions, churches, and hospitals can all do their part to keep Massachusetts' waterways clean. Click below for tips to prevent stormwater pollution from your parking lots, grounds, and operations.
Go to Page Businesses

What Developers Can Do
Stormwater pollution often begins at construction sites, but it doesn't have to. Click the link below for tips that developers can take to keep Massachusetts waterways clean.
Go to Page Developers

What Industrial Facilities Can Do
Industrial facilities can do their part to reduce stormwater pollution in Massachusetts. Click the link below for tips about parking lots, grounds, and waste management practices.
Go to Page Facilities

Residents

We need every resident to do their part to reach our goal of clean healthy waterways. The following tips will help you prevent stormwater pollution from your home.

Pet Waste Belongs in the Trash!

You hate stepping in it. And fish hate swimming in it, too! When you walk your dog, make sure to carry a plastic bag with you so that you can pick up the waste and dispose of it properly. Flushing is the best disposal method (don't flush the plastic bag), but you can also throw it in a trash can. Some towns will fine you if they catch you leaving it in public areas!

Do your "doody" in both public areas and in your yard. To learn more, visit the Neponset Stormwater Partnership

Yard Waste

In the spring, bag your grass clippings for curbside pickup. In the fall, do it again with your leaves. Even better, compost them to make a natural fertilizer for your garden. But whatever you do, don't dump them in a brook or storm drain, and don't leave them on the sidewalk!

Learn more from the Mystic River Watershed Association.

Lawn Chemicals and Fertilizer

Test your soil and read the label before you apply fertilizer. If you use too much fertilizer, the excess will just wash away in the next rain, polluting your local waterways. Use fertilizers sparingly and sweep up driveways, sidewalks and walkways.

You may not even need to fertilize your yard! According to experts, most homeowners over-fertilize their lawns. The University of Massachusetts has a handy guide on how to test your soil to see if you need to fertilize.

Lawn Watering

A lawn needs just one inch of water per week to be green. If you are watering more than that, a lot of that water is running off into the nearest waterway, taking your fertilizer, seeds, and hard earned money right along with it. Adjust your sprinklers so they don't water the driveway or sidewalk. Even better, use drip irrigation or soaker hoses.

There are lots of useful tips in the Guide to Lawn and Landscape Water Conservation, published by the Massachusetts Water Resources Commission.

Household Chemicals

If you stop to think about it, your home is full of chemicals, such as cleaners, medicines, pesticides, weed and bug killers, and old paint, just to name a few. When you're cleaning out the garage, it might be tempting to pour those chemicals down the toilet, sink or the storm drain, but don't!

The Massachusetts Department of Environmental Protection has created a website where you can find a household hazardous waste disposal facility that is convenient to you.

Car Care

It matters how and where you take care of your car. When you are working on your car, take care to catch your used fluids in safe containers that you can take to a recycling center. Never dispose of these chemicals down a storm drain. If you spill anything, mop it up quickly. It's best to take your car to a professional car wash. They have special equipment to treat all the dirty water they produce. If you wash your car at home, it's best to park your car on the grass, first, rather than leave it on the driveway.

For more on these and other car care tips, visit our friends at Think Blue Maine.

Soak Up the Rain!

Rainwater won't become stormwater pollution if you keep it on your property! You can do that by connecting rain barrels to your gutters, and using the water they capture in your lawn or garden later. If you are renovating, consider a rain garden or modern "pervious" pavers that allow water to soak through into the soil below.

You can learn more about all these techniques by reading this fact sheet from the Pioneer Valley Planning Commission.

Septic Systems

If you smell sewage or see especially lush plants growing on your leach field, then your septic system might need attention. If your septic system needs repair, it might be polluting your local waterways. If it gets too bad, it might back up into your home!

Learn more about the symptoms and solutions to failing septic systems from the Town of Newbury Stormwater Committee.

Pool Care

Do you know how your eyes can burn after too much time in the chlorinated water of a swimming pool? Imagine how that feels for fish and frogs! Pool owners should stop chlorinating as soon as they know they're going to drain the pool, and drain the water on the grass rather than directly into a waterway.

For more tips, check out this brochure from the Massachusetts Department of Conservation and Recreation.

Businesses

Businesses, institutions, churches, and hospitals can all do their part to keep Massachusetts' waterways clean. Here you can find tips to prevent stormwater pollution from your parking lots, grounds, and operations.

Waste and Material Storage

If rain falls into your dumpsters or on your raw materials, then it's carrying some of that stuff with it as it drains away. A little good housekeeping and a few sheds or tin roofs can take care of that

problem. Property managers should inspect dumpster regularly and only store chemicals outside with tight-fitting lids.

For more tips like these, check out this handy brochure from the Bureau of Water Supply Protection at the Massachusetts Department of Conservation and Recreation.

Parking Lots

Businesses, churches, hospitals, and other institutions can do a lot to reduce polluted runoff from their parking lots.One solution is to replace asphalt with modern "permeable" pavements that allow rain and melting snow to soak in rather than run off. Another is to design parking lots to drain into catch basins, filter strips, and stormwater ponds, rather than directly into the storm sewer system.

You can learn more about these techniques by reading this fact sheet from the Pioneer Valley Planning Commission.

Snow and Ice Removal

When businesses, churches, and hospitals use road salt and de-icers, melting snow carries those chemicals into waterways. Businesses should store these chemicals carefully and apply them sparingly. When purchasing, read the labels on de-icing products and choose those that are not toxic to animals and plants.

The Massachusetts Department of Environmental Protection has some guidelines on where and how businesses and local governments should store road salt, to protect our waterways.

Outdoor Cleaning

Grounds crews should sweep sidewalks, loading docks, and parking lots and dispose of the trash and debris in the dumpster, rather than washing these areas with a hose. If outdoor washing is necessary, look for environmentally friendly, water-based cleaning products. Maintenance crews should rinse paint cans, brushes, buckets, or other cleaning materials in an indoor sink.

For a great example of operational procedures, check out the Town of Sudbury's Clean Water Best Practices manual.

Landscaping Chemicals and Fertilizer

Groundskeepers should test soil and read the label before applying fertilizer. If they use too much fertilizer, the excess will just wash away in the next rain, polluting local waterways. Use fertilizers sparingly and sweep up driveways, sidewalks, and walkways.

Fertilizer may not even be necessary! According to experts, many businesses over-fertilize their landscaping. The University of Massachusetts has a handy guide for testing soil to determine if it can absorb any more nutrients.

Irrigation

Most businesses only need to water their landscaping once a week. It's smart to put sprinklers on timers so they water early in the morning, and point them so that they don't water the sidewalk or driveways. If your businesses has stormwater ponds, cisterns, or rain barrels that capture rain before it leaves your property, using that water on your landscaping often makes a lot of sense.

The Metropolitan Area Planning Council includes a chapter about business reuse of water in its guide Once is Not Enough: A Guide to Water Reuse in Massachusetts .

Fleet Care

Many institutions maintain fleets of trucks, buses, ambulances, and other vehicles on site. Do this carefully to keep gasoline, oil, and soap suds out of storm drains and waterways. Vehicle maintenance should be done indoors, using drop cloths and drip pans. If there is a spill, clean it up promptly using absorbent sand and kitty litter.

The Massachusetts Office of Energy and Environmental Affairs has published guidelines on fleet maintenance for municipal governments. It's good advice for businesses, churches, hospitals, and other institutions, too!

Developers & Construction

Stormwater pollution often begins at construction sites, but it doesn't have to. Here are steps that developers can take to keep Massachusetts waterways clean.

Get Your Permit

Many kinds of construction sites are required by federal law to take steps to prevent stormwater pollution -- and permit requirements in Massachusetts are changing. Check with the

conservation commission for the town where your construction project is located before you disturb the soil.

Learn more about the stormwater permits from the U.S. Environmental Protection Agency. See also Massachusetts Stormwater Handbook & Stormwater Standards for more best practices to manage stormwater on your site.

Low Impact Development Practices

Low Impact Development (LID) practices protect and use the land's natural features as a way to filter and slow the flow of stormwater. These practices manage stormwater at its source and protect natural areas, too. They can also save developers money by minimizing the need to add infrastructure like streets and gutters. Examples of LID practices include:

Permeable pavement, such as pavers and crushed stone, can be used in place of asphalt and concrete to pave surfaces. These materials allow rain and snow to soak into the ground instead of flowing into storm drains. They are often used for parking lots, driveways, and sidewalks.

Bioretention areas (also known as rain gardens) are shallow depressions in the landscape that collect water that runs off from hard surfaces. These areas are planted with grasses and flowering plants that help filter the water as it soaks into the ground. They are often placed in parking lot islands or street medians.

Vegetated filter strips are broad, gently sloping areas of grass or plants that trap, filter, and slow stormwater runoff. They are often located by roads, parking lots, and driveways.

You can learn more about LID practices in this Massachusetts Low Impact Development Toolkit and on the Neponset Stormwater Partnership's website.

Pre Construction Planning

A little planning ahead of time can go a long way to prevent stormwater pollution. Begin by choosing your site carefully. Place storage and maintenance areas far away from storm drains and waterways. Make sure that everyone working on-site knows their roles in carrying out your Stormwater Pollution Prevention Plan, if you are required to have one.

For more useful tips, see General Construction and Site Supervision Stormwater Tips, published by the Massachusetts Department of Conservation and Recreation.

Erosion & Sediment Control

It's important that you pick a combination of erosion and sediment controls that work for your site. This includes practices that protect natural landscape features, like streams and wetlands, and stabilize soil. You will also need to put practices in place to protect and maintain silt fences, storm drain inlets, and construction entrances.

Check out the Neponset Stormwater Partnership's construction webpage for a list of best practices.

Site Maintenance

A little good housekeeping can keep polluted runoff from ending up in nearby waterways. Sweep often, keep dumpsters covered, and remove trash daily. Store construction materials under a tarp or a plastic sheet to protect from rain and snow. Clean up small spills immediately using absorbent materials, like sand.

More cleaning and maintenance tips can be found in General Construction and Site Supervision Stormwater Tips, published by the Massachusetts Department of Conservation and Recreation.

Industrial Facilities

Industrial facilities can do their part to reduce stormwater pollution in Massachusetts by attending to their parking lots, grounds, and waste management practices.

Get Your Permit

Many kinds of industrial facilities are required by federal law to take steps to prevent stormwater pollution, and these permit requirements are changing Massachusetts. Your site may be covered by a Multi-Sector General Permit, or may require its own permit. Check with the conservation commission in the town where your facility is located.

Learn more about stormwater permits from the U.S. Environmental Protection Agency and Industrial Stormwater Best Management Practices, published by the Massachusetts Department of Environmental Protection.

Equipment Maintenance

Gasoline, oil, and grease from your equipment can wash into storm drains and pollute waterways. For repairs and routine maintenance, use drip pans to catch fluids and keep materials like sand and kitty litter close by to help dry up small spills. Fix leaks and clean up all spills as soon as possible.

You can find more tips in this brochure from the Neponset Stormwater Partnership.

Site Landscaping

Excess fertilizer and lawn waste (think leaves and grass clippings) can wash away and pollute local waterways. To stop this, test your soil and read the label before you apply fertilizer. Use fertilizers sparingly and sweep up driveways, sidewalks and walkways. To manage erosion, cover piles of dirt and replant bare areas as quickly as possible.

Find more tips on Neponset Stormwater Partnership's industrial facilities webpage and in this brochure(published by the Massachusetts Department of Environmental Protection). Also see this handy guide for testing soil from the University of Massachusetts.

Irrigation

Did you know that a lawn needs just one inch of water per week to be green? Your industrial facility can have healthy landscaping if you water just once a week. Put sprinklers on timers so they water early in the morning and place them so that they don't water the sidewalk or driveways.

You can learn more about irrigating your site at Neponset Stormwater Partnership's industrial facilities webpage.

Waste Disposal

Rain that falls into and around your dumpsters can pick up trash, dirt, and other material as it drains away. You can keep a tidy facility and protect local waterways by sweeping up dust and dirt, keeping your dumpster closed, and checking for leaks. Scheduling regular trash pick-ups will help ensure that your dumpster is never too full.

For more tips like these, check out this handy brochure from the Neponset Stormwater Partnership.

Chemical Storage

You can keep spills and leaks at bay by taking some simple steps to safely handle and store your chemicals. Make sure all chemicals are kept in containers that have tight-fitting lids. Check often for leaks and close any containers that are left open. Any chemicals that are stored outside should be placed under cover, such as in a shed or under a tarp, to protect from rain and snow.

For more chemical storage tips, as well as information on how to choose safer chemicals products, visit the Neponset Stormwater Partnership's industrial facilities webpage.

Spill Prevention & Response

It's important to be prepared in the event that a spill occurs. Have a plan in place that outlines what you must do to prevent and respond to a spill. Keep a spill kit handy and fully stocked, ready for use. Use absorbent materials, like sand and kitty litter, for liquid spills. Any chemical spills, especially those happening outside, should be swept up immediately. Never hose down a spill area. Always report chemical spills to your local hazardous waste cleanup team.

Learn more about spill prevention and response on the Neponset Stormwater Partnership's industrial facilities webpage and in this brochure from the Massachusetts Department of Environmental Protection.

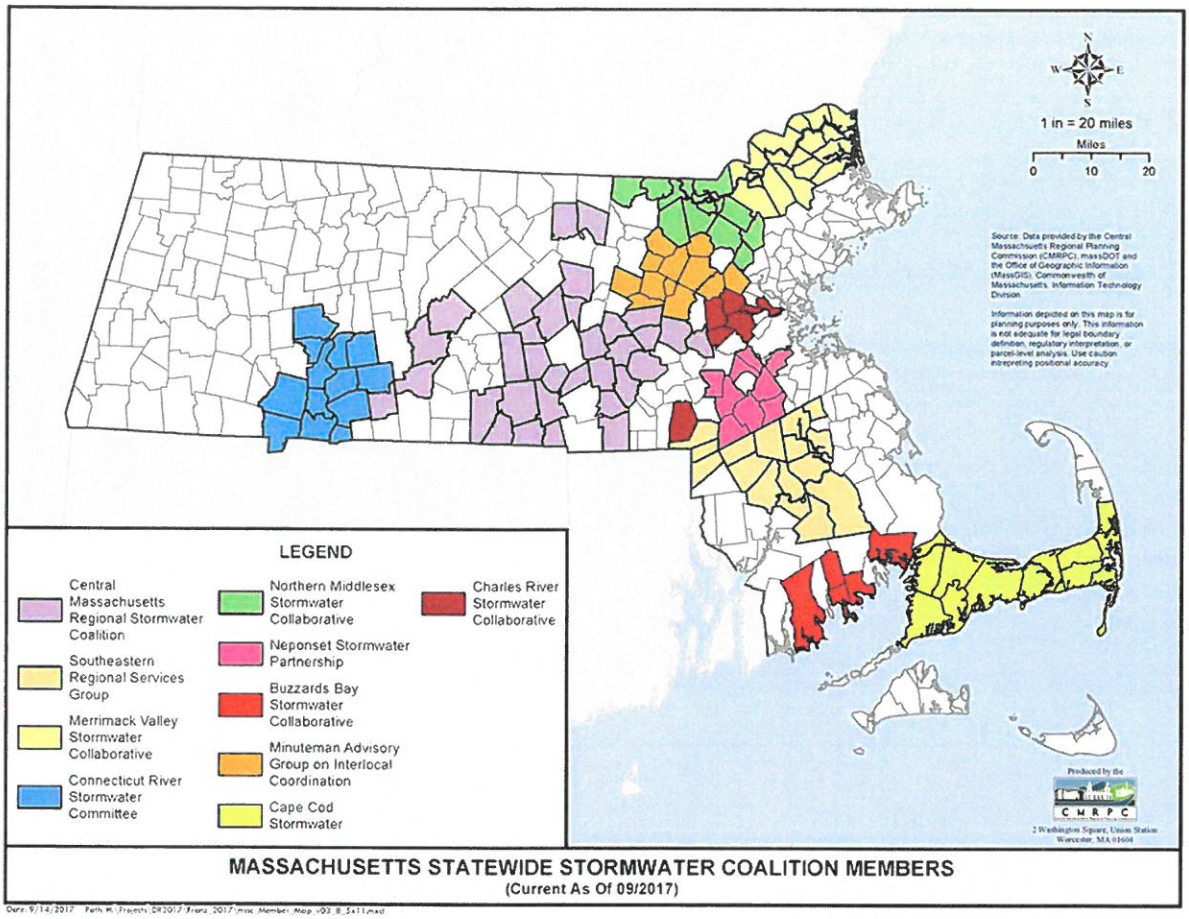
What is Think Blue Massachusetts?

Abington partners with other communities in Massachusetts to help residents and businesses do their part to reduce polluted runoff and keep our state's rivers, lakes and streams clean and healthy.

Who We Are

Think Blue Massachusetts is run by the Massachusetts Statewide Municipal Stormwater Coalition. We are made up of ten regional stormwater groups. We all joined forces in 2016 to help towns and cities meet their stormwater permit requirements. All together we represent 130 communities across the state.

Our mission is to help residents and businesses take steps to reduce runoff and keep our state's lakes, rivers, and streams clean and healthy.



- Central MA Regional Stormwater Coalition
- Merrimack Valley Stormwater Collaborative
- Northern Middlesex Stormwater Collaborative
- Neponset Stormwater Partnership
- Connecticut River Stormwater Committee
- Southeastern Regional Stormwater Coalition
- Cape Cod Stormwater Coalition
- Minuteman Advisory Group on Interlocal Coordination
- Buzzards Bay Stormwater Collaborative
- Charles River Stormwater Collaborative

Acknowledgments

Think Blue Massachusetts is grateful to the following organizations and individuals for their various contributions to this effort:

Berkshire Design Group, Inc.

Cumberland County Soil and Water Conservation District

Neponset River Watershed Association

Massachusetts Department of Environmental Protection

Pioneer Valley Planning Commission

Think Blue Maine

Think Blue San Diego

Thomas Bonte

Town of Charlton, MA

City of Framingham, MA

Water Words That Work, LLC

See links below for more information:

https://www.youtube.com/watch?v=fLXcJiA-azA

https://www.youtube.com/watch?v=2GiV7CTVSHM

https://www.thinkbluemassachusetts.org/what-is-stormwater